

CLAIMS

1. Device for injecting (8) a treatment gas into a molten metal contained in a tank (1), the said device being designed to be fixed in one of the walls (2) of the tank and comprising at least one injection nozzle (18) 5 equipped with an end hole (19), characterised in that it comprises a mobile means (14) that can be manoeuvred from outside the injection device and capable of unblocking the said end hole of the nozzle.

2. Injection device (8) according to claim 1, 10 characterised in that the mobile means (14) is capable of passing through the end hole (19).

3. Injection device (8) according to claim 1 or 2, characterised in that the said mobile means comprises a rod (14) installed free to slide inside the nozzle (18), 15 the said rod being capable of passing from a rest position in which it is set back from the end hole (19) so as to enable passage of the treatment gas, to an advanced position.

4. Injection device (8) according to claim 3, 20 characterised in that, in the advanced position, the rod (14) emerges from the end hole (19).

5. Injection device (8) according to claim 3 or 4, characterised in that the rod (14) comprises an upstream part that is firstly capable of passing through one end 25 of the nozzle (18) opposite the end hole (19), while maintaining leak tightness, and secondly is equipped with a manual control device (20).

6. Injection device (8) according to claim 5, characterised in that the manual control device comprises a handle (20).

5 7. Injection device (8) according to either claims 5 or 6, characterised in that it comprises an elastic element (22) which holds the rod (14) in the rest position.

8. Injection device (8) according to claim 3 or 4, characterised in that an automated control device is
10 connected to the rod (14).

9. Injection device (8) according to any one of claims 3 to 8, characterised in that the nozzle (18) contains at least one rod guidance means (14).

10. Injection device according to claim 9,
15 characterised in that the guidance means is composed of a ring presenting a central hole and peripheral holes.

11. Injection device (8) according to any one of claims 3 to 10, characterised in that the cross section or diameter of the rod (14) decreases along the direction
20 of the end hole (19) of the nozzle (18).

12. Treatment tank (1) for a molten metal, characterised in that it comprises at least one gas injection device (8) according to any one of claims 1 to 11.

25 13. Use of the device according to one of claims 1 to 11, or use of the tank according to claim 12 for treatment of a molten metal flow.

14. Use according to claim 13, characterised in that the molten liquid is aluminium, an aluminium alloy, magnesium or a magnesium alloy.